

endpoint to the second call endpoint, each second report transiting through the media router; and

determining, in the media router, a round-trip delay between the first call endpoint and the second call endpoint based on a plurality of interception times, each interception time corresponding to the time of intercepting one of the RTCP reports;

recording a last session report (LSR) timestamp when the first RTCP sender report transits through the media router;

marking a first timestamp in the media router when the first RTCP receiver report transmits through the media obtaining a delay since LSR (DLSR) representing processing delay in the second call endpoint; and

determining the round-trip delay based upon the LSR timestamp, the DLSR, and the first timestamp.

46. (Cancelled)

47. (Currently Amended) The method of claim [[41]] 45, further comprising the step of:

dividing the round-trip delay in half to produce a one-way latency between the first call endpoint and the second call endpoint.

48-49. (Cancelled)

50. (Currently Amended) The system of claim [[48]] 52, wherein the means for intercepting a first RTCP sender report comprises:

means for receiving, in the media router, the first RTCP sender report, the first sender report originating from the first call endpoint and destined for the second call endpoint and transiting through the media router; and

means for transmitting the first RTCP sender report to the second call endpoint.

51. (Cancelled)

52. (Currently Amended) ~~The system of claim 48, further comprising:~~ A system for determining latency for a real-time transport protocol (RTP) data flow between a first call endpoint and a second call endpoint, said RTP data flow transiting through a media router, comprising:

means for intercepting a first RTCP sender report sent from the first call endpoint to the second call endpoint, and a first RTCP receiver report sent from the second call endpoint to the first call endpoint, each first report transiting through the media router;

means for intercepting a second RTCP sender report sent from the second call endpoint to the first call endpoint, and a second RTCP receiver report sent from the first call endpoint to the second call endpoint, each second report transiting through the media router;

means for determining, in the media router, a round-trip delay between the first call endpoint and the second call endpoint based on a plurality of interception times, each interception time corresponding to the time of intercepting one of the RTCP reports;

means for recording a last session report (LSR) timestamp when the first RTCP sender report transits through the media router;

means for marking a first timestamp in the media router when the first RTCP receiver report transmits through the media router; means for obtaining a delay since LSR (DLSR) representing processing delay in the second call endpoint; and

means for determining the round-trip delay based upon the LSR timestamp, the DLSR, and the first timestamp.

53. (Cancelled)

54. (Currently Amended) The system of claim [[48]] 52, further comprising:

means for dividing the round-trip delay in half to produce a one-way latency between the first call endpoint and the second call endpoint.

55-56. (Cancelled)

57. (Currently Amended) The apparatus of claim [[55]] 59, wherein the processor is further programmed to enable the apparatus to:

receive, in the media router, the first RTCP sender report, the first sender report originating from the first call endpoint and destined for the second call endpoint and transiting through the media router; and

transmit the first RTCP sender report to the second call endpoint.

58. (Cancelled)

59. (Currently Amended) ~~The apparatus of claim 55;~~

An apparatus for determining latency for real-time transport protocol (RTP) data flows between a first call endpoint and a second call endpoint, said RTP data flows transiting through the apparatus, comprising:

a transceiver;

memory having stored thereon program code; and

a processor that is programmed by the program code to enable the apparatus to:

intercept a first RTCP sender report sent from the first call endpoint to the second call endpoint, and a first RTCP receiver report sent from the second call endpoint to the first call endpoint, each first report transiting through a media router;

intercept a second RTCP sender report sent from the second call endpoint to the first call endpoint, and a second RTCP receiver report sent from the first call endpoint to the second call endpoint, each second report transiting through the media router; and

determine, in the media router, a round-trip delay between the first call endpoint and the second call endpoint based on a plurality of interception times, each interception time corresponding to the time of intercepting one of the RTCP reports

~~wherein the processor is further programmed to enable the apparatus to:~~

~~record a last session report (LSR) timestamp when the first RTCP sender report transits through the media router;~~

~~mark a first timestamp in the media router when the first RTCP receiver report transmits though the media obtain a delay since LSR (DLSR) representing processing delay in the second call endpoint; and~~

~~determining the round-trip delay based upon the LSR timestamp, the DLSR, and the first timestamp.~~

60. (Cancelled)

61. (Currently Amended) The apparatus of claim [[55]] 59, wherein the processor is further programmed to enable the apparatus to:

divide the round-trip delay in half to produce a one-way latency between the first call endpoint and the second call endpoint.

62. (Currently Amended) A method for determining latency for a real-time transport protocol (RTP) data flow between a first call endpoint and a call second endpoint, said RTP data flow transiting through a media router, comprising the steps of:

intercepting a first RTCP sender report sent from the first call endpoint to the second call endpoint, and a first RTCP receiver report sent from the second call endpoint to the first call endpoint, each first report transiting through the media router, wherein intercepting a first RTCP sender report comprises the steps of:

receiving, in the media router, the first RTCP sender report, the first sender report originating from the first call endpoint and destined for the second call endpoint and transiting through the media router;

transmitting the first RTCP sender report to the second call endpoint;

intercepting a second RTCP sender report sent from the second call endpoint to the first call endpoint, and a second RTCP receiver report sent from the first call endpoint to the second call endpoint, each second report transiting through the media router; and

determining, in the media router, a round-trip delay between the first call endpoint and the second call endpoint based on a plurality of interception times, each interception time corresponding to the time of intercepting one of the RTCP reports;

recording a last session report (LSR) timestamp when the first RTCP sender report transits through the media router;

marking a first timestamp in the media router when the first RTCP receiver report transmits through the media obtaining a delay since LSR (DLSR) representing processing delay in the second call endpoint; and

determining the round-trip delay based upon the LSR timestamp, the DLSR, and the first timestamp. ~~The method of claim 45,~~ wherein the determining step further comprises: subtracting both the LSR timestamp and the DLSR from the first timestamp to determine the round-trip delay.

63. (Currently Amended) ~~The system of claim 52,~~

A system for determining latency for a real-time transport protocol (RTP) data flow between a first call endpoint and a second call endpoint, said RTP data flow transiting through a media router, comprising:

means for intercepting a first RTCP sender report sent from the first call endpoint to the second call endpoint, and a first RTCP receiver report sent from the second call endpoint to the first call endpoint, each first report transiting through the media router;

means for intercepting a second RTCP sender report sent from the second call endpoint to the first call endpoint, and a second RTCP receiver report sent from the first call endpoint to the second call endpoint, each second report transiting through the media router;

means for determining, in the media router, a round-trip delay between the first call endpoint and the second call endpoint based on a plurality of interception times, each interception time corresponding to the time of intercepting one of the RTCP reports;

means for recording a last session report (LSR) timestamp when the first RTCP sender report transits through the media router;

means for marking a first timestamp in the media router when the first RTCP receiver report transmits through the media router; means for obtaining a delay since LSR (DLSR) representing processing delay in the second call endpoint;

means for determining the round-trip delay based upon the LSR timestamp, the DLSR, and the first timestamp, wherein the means for determining further comprises:  
means for subtracting both the LSR timestamp and the DLSR from the first timestamp to determine the round-trip delay.

64. (Currently Amended) ~~The apparatus of claim 59, wherein the processor is further programmed to enable the apparatus to:~~

An apparatus for determining latency for real-time transport protocol (RTP) data flows between a first call endpoint and a second call endpoint, said RTP data flows transiting through the apparatus, comprising:

a transceiver;

memory having stored thereon program code; and

a processor that is programmed by the program code to enable the apparatus to:

intercept a first RTCP sender report sent from the first call endpoint to the second call endpoint, and a first RTCP receiver report sent from the second call endpoint to the first call endpoint, each first report transiting through a media router;

intercept a second RTCP sender report sent from the second call endpoint to the first call endpoint, and a second RTCP receiver report sent from the first call endpoint to the second call endpoint, each second report transiting through the media router; and

determine, in the media router, a round-trip delay between the first call endpoint and the second call endpoint based on a plurality of interception times, each interception time corresponding to the time of intercepting one of the RTCP reports

record a last session report (LSR) timestamp when the first RTCP sender report transits through the media router;

mark a first timestamp in the media router when the first RTCP receiver report transmits through the media obtain a delay since LSR (DLSR) representing processing delay in the second call endpoint;

determining the round-trip delay based upon the LSR timestamp, the DLSR, and the first timestamp; and

subtract both the LSR timestamp and the DLSR from the first timestamp to determine the round-trip delay.